FINAL ENVIRONMENTAL IMPACT STATEMENT
MISSISSIPPI RIVER-GULF OUTLET, NEW LOCK AND CONNECTING CHANNELS

Lead Agency: U.S. Army Corps of Engineers, New Orleans District

ABSTRACT: In New Orleans, Louisiana, the Mississippi River is connected to the Mississippi River-Gulf Outlet (MRGO) and the eastern portion of the Gulf Intracoastal Waterway (GIWW) by a 640- by 75- by 31.5-foot lock on the Inner Harbor Navigation Canal (IHNC). The IHNC lock, also known as the Industrial Canal lock, has been operating at its maximum capacity for a number of years and vessel delays and congestion at the lock are chronic problems. Although several sites for a new lock have been evaluated, all but one have been eliminated from further consideration because of impracticality, environmental impacts, and socioeconomic impacts. Two action alternatives are presented in this report. The no-action alternative, consisting of continued operation and maintenance of the existing lock, is presented as Plan 1. Plan 2 consists of replacing the St. Claude Avenue bridge over the IHNC with a mid-level, vertical lift-span bridge. The existing low-level bridge causes significant interference with navigation traffic. The bridge constructed for Plan 2 would be of minimal dimensions necessary for safe navigation through the existing lock and would not be compatible with future replacement of the IHNC lock. Plan 3 is divided into six sub-plans based on the size of the lock to be constructed. Plans 3a through 3f would include a new lock in the IHNC, north of the Claiborne Avenue bridge. The smallest lock investigated (Plan 3a) would be 900 feet long by 90 feet wide by 22 feet deep, while the largest lock (Plan 3f) would be 1,200 feet by 110 feet by 36 feet. Replacement of the St. Claude Avenue bridge with a low-level, double-bascule bridge and raising the towers of the Claiborne Avenue bridge are integral components of these plans. The environmental impacts of the lock replacement plans are very similar. Plan 3b, which provides for a 900- by 110- by 22-foot lock, has been determined to be the national economic development plan based on its net excess benefits over costs. Plan 3f, which provides for a 1,200- by 110- by 36-foot lock, is designated as the tentatively selected plan (TSP). The Port of New Orleans, the local project sponsor, would be responsible for its added incremental cost. Plan 3f would provide operational flexibility for deep-draft vessels and is compatible with the controlling depth of the MRGO. Although extensive efforts have been made to avoid and minimize socioeconomic impacts in the urban environment adjacent to the IHNC, many impacts are unavoidable with a lock replacement project. The TSP includes a community impact mitigation plan which would avoid, minimize, and compensate for adverse impacts to local businesses, property values, public and community facilities and services, transportation, noise, air quality, aesthetic values, cultural resources, and recreational resources.

Date: _____

Please send your comments to the District Engineer by the date stamped above. For further information, please contact Mr. Richard Boe, U.S. Army Engineer District (PD-RS), P.O. Box 60267, New Orleans, Louisiana 70160-0267. Telephone: (504) 862-1505.

Note: Information, displays, maps, etc., discussed in the Main Report and Appendixes are incorporated by reference in the Environmental Impact Statement.

1. SUMMARY

1.1. MAJOR CONCLUSIONS AND FINDINGS

1.1.1. Purpose and Alternatives

1.1.1.1. The purpose of this study is to determine the best action for alleviating or eliminating navigation traffic congestion associated with the existing lock on the Inner Harbor Navigation Canal (IHNC) in New Orleans, Louisiana. The lock allows for navigation between the Mississippi River and the IHNC, the eastern portion of the Gulf Intracoastal Waterway (GIWW), and the Mississippi River-Gulf Outlet (MRGO).

1.1.1.2. A long history of detailed studies and extensive public involvement has resulted in the elimination of all but two action plans from further consideration. The first action plan would include only the replacement of the St. Claude Avenue bridge with a mid-level, double-bascule bridge. The existing low-level bridge interferes with lock operations and a new bridge would moderate, but not eliminate, vessel traffic congestion for a period of time. The bridge to be constructed under this plan would not be compatible with construction of a new lock in the future. The second plan under consideration would involve replacement of the existing lock with a new lock located in the existing channel of the IHNC between the Claiborne Avenue and Florida Avenue bridges that span the canal, and demolition of the existing lock. This location for the new lock is referred to as the North of Claiborne Avenue site. This plan would also involve replacement of the existing, low-level St. Claude Avenue bridge with a low-level, double-bascule bridge to allow for efficient use of the new lock, and modifications of the Claiborne Avenue bridge to make it compatible with the new lock. Several lock chamber dimensions for the North of Claiborne Avenue site have been considered and analyzed.

1.1.1.3. Other sites for a replacement lock have been eliminated from consideration because they are considered not implementable for environmental and socioeconomic reasons. Construction of a new lock in the vicinity of Violet, Louisiana, would cause significant adverse effects to tidal wetlands and is vehemently opposed by the local populace and locally-elected officials. Other lock alignments within the IHNC corridor would require massive, un-mitigable impacts to the adjacent urban neighborhoods or would require a closure of the canal for an extended period of time. Nevertheless, residents of neighborhoods adjoining the IHNC and their locally-elected officials remain steadfastly opposed to the recommended plan, mainly because of socioeconomic impacts.

1.1.2. Rationale for the Recommended Plan

1.1.2.1. The plan which maximizes national economic development (NED) benefits consists of a new lock at the North of Claiborne Avenue site with usable chamber

dimensions of 900 feet long by 110 feet wide by 22 feet deep. Other features of the plan include replacement of the St. Claude Avenue bridge with a low-level, double-bascule crossing; modifications to the superstructure of the Claiborne Avenue bridge; and a mitigation package to compensate area residents and commuters for unavoidable adverse impacts. This plan would accommodate shallow-draft vessels (barges) and a very limited number of deep-draft vessels (ships).

1.1.2.2. The recommended plan is similar to the NED plan except that the usable depth of the lock is 36 feet instead of 22 feet and the length is 1,200 feet instead of 900 feet. This is also the plan preferred by the Board of Commissioners for the Port of New Orleans, the local sponsor. All other project features would be the same or very similar. The recommended plan would be commensurate with the controlling depth of the MRGO which is also 36 feet and would accommodate a large number of the deep-draft vessels that utilize the Port of New Orleans. Designation of the recommended plan is based on environmental, social, and economic considerations as well as the operational flexibility it provides. In addition, this plan would accommodate, to the maximum extent practicable, the desires of local interests including nearby residents. The Port of New Orleans has indicated their interest in contributing the difference in costs between a shallow-draft lock (NED plan) and the recommended plan in order to allow for deep-draft vessel use of the new lock.

1.1.3. Environmental Impacts

1.1.3.1. The recommended plan would have adverse impacts on fish and wildlife habitat. The adverse impacts are primarily associated with a temporary construction site (graving site) designated for partial construction of lock modules. The graving site would cause the loss of 25 freshwater, wetland acres. This impact would be fully mitigated by restoring brackish marsh, in another location, with uncontaminated soil removed from the bank of the IHNC. Canal bank soil and canal bottom sediment considered to have contaminant levels too high for use in wetland restoration would be deposited in a previously-used MRGO disposal site. This disposal site contains low-quality wetlands and upland scrub-shrub habitat. Because of the disposal site's low habitat quality, no compensatory mitigation for its use as a disposal area is proposed. The area would likely return to a habitat similar to its existing condition after deposition of the dredged material.

1.1.3.2. As much as 2.8 acres of drained, wooded land may be required for construction of a detour road that is part of the community impact mitigation plan. No compensatory mitigation is proposed for this potential loss of wooded land because of its previously altered condition and its isolation in a suburban community. However, the plan to mitigate for impacts of the graving site over-compensates for those impacts, and the excess wetland developed would provide an out-of-kind mitigation for loss of the wooded land.

1.1.3.3. The recommended plan would cause adverse socioeconomic impacts including temporary traffic detours and congestion, relocation of two businesses, job displacements,

lost revenues to some local businesses, and construction noise in the vicinity of the IHNC. A comprehensive community impact mitigation plan is proposed to avoid, minimize, and compensate for most of the adverse socioeconomic impacts of project construction and make the plan more acceptable to the local populace.

1.1.4. Environmental Features

1.1.4.1. During the study process, plans were developed to use all excess dredged soil and sediment for wetland restoration. Concerns expressed by the U.S. Fish and Wildlife Service during the study process resulted in elimination of most dredged material for wetland restoration because of contaminants. Clean soil from the east bank of the IHNC, which has been determined to be suitable for aquatic disposal, would be used to develop wetlands as mitigation for impacts of the graving site.

1.1.4.2. Material excavated for a bypass channel around the existing lock would be used for backfill around the new lock site. Some of the material to be dredged at the site of the existing lock, and between St. Claude Avenue and the Mississippi River, would also be used for backfill with the excess hydraulically pumped to the main channel of the river to be naturally carried downstream.

1.1.5. Threatened and Endangered Species

No Federally-listed threatened or endangered species, nor any critical habitat, would be affected by the recommended plan. Likewise, no species or habitats of local concern, as listed by the Louisiana Natural Heritage Program, would be affected.

1.1.6. Executive Order 11988, Floodplain Management

1.1.6.1. The recommended plan involves construction within the base (100-year) floodplain. All alternatives considered, including the alternatives eliminated from detailed consideration, would be located within the base floodplain. No non-floodplain alternatives exist. The floodplain in the area of the recommended plan is completely developed for residential, commercial, and industrial purposes. Levee systems in the area provide protection from hurricane and Mississippi River flooding, and protected areas are drained by pumping to remove excess rainwater.

1.1.6.2. The recommended plan would not encourage development in the base floodplain, although waterfront industrial sites along connecting waterways could become more desirable due to the improvement in navigation traffic flows. The recommended plan would not increase or reduce the hazard or risk of flooding. All levees and floodwalls that would be realigned for project construction would be rebuilt to current design standards for hurricane or river flooding protection, whichever is applicable. Since the IHNC area is totally developed, the natural and beneficial floodplain values of the area are virtually non-existent.

1.1.7. Executive Order 11990, Protection of Wetlands

1.1.7.1. The IHNC, although technically considered "waters of the U.S." and subject to Section 404(b) of the Federal Water Pollution Control Act (Clean Water Act), is not a wetland. The lands immediately adjacent to the IHNC which would be dredged and/or filled, likewise are not wetlands. The area is totally developed and does not support wetland vegetation.

1.1.7.2. The graving site designated for off-site construction of lock modules would cause the direct loss of 25 wetland acres. The wetland loss would be fully mitigated by the restoration of herbaceous and wooded wetlands in an area which now contains shallow open water. Wetland impacts and the need for mitigation could be avoided by designation of an acceptable, non-wetland, developed site for lock module construction, if available.

1.1.8. Executive Order 12898, Environmental Justice

The potential adverse impacts of a lock replacement project on the largely minority and economically disadvantaged population in the vicinity of the IHNC has been considered throughout the many years of this study. When the Violet Site was eliminated from further study in 1991, the New Orleans District realized the massive impacts to the natural environment that a new lock and connecting channels would have at that site. There appeared to be little chance of improving the natural environment in the vicinity through mitigation measures. The District also recognized there would be adverse socioeconomic impacts from a project at the IHNC site. However, in eliminating the Violet site, the District looked at the IHNC site as an opportunity to improve the overall condition of the entire corridor, including the bridges and the adjacent communities. The inclusion of community impact mitigation, which was developed through an open planning process with community representatives, demonstrates the Corps' sensitivity to the affected communities and good faith effort to avoid, minimize, and compensate affected communities for adverse project impacts.

1.1.9. Section 404(b)(1) Evaluation

Two Section 404(b)(1) evaluations have been prepared for the recommended plan and are contained in Appendix D. One evaluation addresses the graving site. The second evaluation addresses four disposal sites: an area of open water to be used as mitigation for the graving site; the previously-used MRGO disposal area; the main channel of the Mississippi River; and the IHNC in the vicinity of the new lock where large quantities of material would be required for backfill. The New Orleans District, has determined that, on the basis of Section 404(b)(1) guidelines, the disposal of dredged material into the proposed disposal sites would comply with the requirements of the guidelines with inclusion of appropriate and practical conditions to minimize pollution and adverse effects on the aquatic ecosystem.

1.1.10. State Water Quality Certification (Section 401)

The New Orleans District has applied for a State Water Quality Certificate from the Louisiana Department of Environmental Quality (LDEQ) pursuant to Section 401 of the Clean Water Act. The LDEQ has not responded formally to the District's request for Water Quality Certification. The District does not plan to seek an exemption to obtaining a State Water Quality Certificate as allowed by Section 404(r) of the Clean Water Act. Application for State Water Quality Certification is being made voluntarily and as a matter of comity. All criteria either have or will be met for a Section 404(r) exemption; information on the effects of discharge of dredged material into the waters of the United States, including application of Section 404(b)(1) guidelines, are included in this EIS and this EIS will be submitted to Congress before the actual discharge takes place.

1.1.11. Consistency with the Coastal Zone Management Program

A Coastal Zone Management (CZM) consistency determination for the TSP has been prepared and is contained in Appendix D. The U.S. Army Corps of Engineers, New Orleans District has determined that, on the basis of the State of Louisiana's Coastal Use Guidelines, the recommended plan would be consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The Louisiana Department of Natural Resources has agreed that the recommended plan is consistent with the State's Coastal Resources Program, with restrictions on the disposal of dredged materials to prevent violation of State Water Quality Standards.

1.2. AREAS OF RESOLVED CONTROVERSY

Selection of the recommended plan in lieu of a plan that features a different lock alignment at the IHNC, or a new lock at another site as proposed in earlier efforts, minimizes conflicts that have rendered past planning efforts unproductive. The selection of the North of Claiborne Avenue site eliminates the difficulties associated with earlier attempts to implement a plan near Violet, Louisiana. A new lock at the Violet site would not be consistent with national wetlands policy and is strongly opposed at both the leadership and grass-roots level in the political subdivision in which it would have been located. A new lock for all other possible locations within the IHNC corridor is likewise, strongly opposed by the residents and local elected officials representing the area.

1.3. UNRESOLVED ISSUES

Many residents of the neighborhoods adjacent to the IHNC continue to oppose construction of a new lock because they would be inconvenienced or have their businesses adversely affected during the construction period. Also, permanent changes in levee and floodwall configurations would impact the aesthetic condition of the adjacent neighborhoods. The community impact mitigation plan contained in this report should not be viewed as unchangeable. Input from the affected communities and elected officials

during detailed design of the project and during project construction could alter the mitigation plan to make the project more acceptable to the community.

1.4. ENVIRONMENTAL COMMITMENTS AND MITIGATION PLAN

A number of commitments that would minimize or eliminate adverse effects to both the human and natural environment have been included in the recommended plan. These commitments are summarized in Table 1.

TABLE 1
ENVIRONMENTAL COMMITMENTS

Significant Issue or Resource	Reason for Commitment	Commitment
Business and Industry	Businesses in the vicinity of the IHNC may experience a decline in sales and rents during bridge closures.	Provide direct monetary compensation to commercial establishments and landlords that experience an actual, documented decline in sales, rent, or tuition.
	Industrial lessees along the IHNC would be displaced.	Encourage lessees to relocate in Orleans Parish with concessions and incentives in new leases. This effort would also address effects on Tax Revenues.
	The project would adversely affect some local business activity.	Seed money would be provided to establish a business assistance program to serve as a stimulus for local business development.
Employment	Water Resources Development Act of 1986 and Congressional guidance require minority and local involvement in project construction.	Contractors would be required to give preference to hiring fully-qualified residents within the community.
	Many potential workers in most of the vicinity are unskilled and would not be qualified for many construction jobs.	Qualified local residents would be given tuition grants for training at local vo-tech schools to learn skills needed for project construction.
Property Values	Residential property values much of in the IHNC vicinity are depressed; the situation could be worsened during project construction.	Seed money would be provided to establish a neighborhood revitalization program which would serve as a source of money for housing rehabilitation and other community improvement activities.
Public and Community Facilities and Services	Existing police, fire, and emergency medical services may be hampered during the construction period.	Police patrols and emergency medical services would be increased near the IHNC during the construction period.
	Opportunities to use neighborhood recreational facilities may be diminished during project construction.	Community facilities such as playgrounds, gardens, tot lots, and linear parks would be provided. Facilities would be operated by non-Federal interests.
Vehicular Transportation	Construction-related traffic would increase the existing chronic vehicular traffic problems in the IHNC area. Work on bridges may increase traffic problems, impacting residents and commuters.	Specific routes would be designated for construction-related traffic. This would also help mitigate for Noise impacts.[1]
		Any and all roads damaged by construction activities would be repaired.[1]